

Date: Wednesday, 9/26/2007 2:09:17 PM  
User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: TUBE ASSEMBLY
Job Number	: 34896		
Estimate Number	: 11527		
P.O. Number	:	Part Number	: D3021041
This Issue	: 9/26/2007	S.O. No.	: D3021/D3017
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / /	Drawing Revision	: A/A
Previous Run	: 33365	Material	:
Written By	:	Due Date	: 10/15/2007
Checked & Approved By	: <u>J.A. 07.09.26</u>	Qty:	1 Um: Each
Comment	: Est. 01.10.23 New Issue SM		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	M4130NT0750W049	4130 Tube .750 OD x.049W
Comment: Qty.: 2.1875 f(s)/Unit Total : 2.1875 f(s) 4130 Tube .750 OD x.049W Cut:- AISI 4130N tube, Ø3/4" x 0.049" wall batch: <u>M100843</u>		
2.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
Comment: LARGE FABRICATION RESOURCE 1 1-Cut tube as per Dwg D3021  2-Drill tube as per Dwg D3021 using D3021-041T1  3--Deburr		
3.0	QC5	INSPECT WORK TO CURRENT STEP
Comment: INSPECT WORK TO CURRENT STEP		
4.0	M4130NS049	4130 Sheet .049 wall
Comment: Qty.: 1.0500 sf(s)/Unit Total : 1.0500 sf(s) 4130 Sheet .049 wall Cut:- AISI 4130N sheet, 18 gauge (0.050 thick) batch: <u>M11612</u> Identify For D3017-11 Cap		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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## Process Sheet

30M IN  
18/04/2008  
S.056 06.16  
#1 320.9 F  
#2 318.6 F  
#3 302.041 F

Customer: CU-DAR001 Dart Helicopters Services		Drawing Name: TUBE ASSEMBLY	S.056 06.16
Job Number: 34896		Part Number: D3021041	
Job Number:			
Seq. #:	Machine Or Operation:	Description :	
5.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1	
Comment: LARGE FABRICATION RESOURCE 1 1-Cut end caps as per Dwg D3017			
	2-Weld as per Dwg D3021 A/R Steel Rod Batch: M100015	PP 08-04-17	①
6.0	QC9	VISUAL WELDING INSPECTION	
Comment: VISUAL WELDING INSPECTION		108/04/17	②
7.0	QC5	INSPECT WORK TO CURRENT STEP	
Comment: INSPECT WORK TO CURRENT STEP		108/04/17	③
8.0	POWDER COATING	POWDER COATING	
Comment: POWDER COATING Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3		PL 08-04-18	④
9.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION	
Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION		SB 08/04/22	⑤
10.0	PACKAGING 1	PACKAGING RESOURCE #1	
Comment: PACKAGING RESOURCE #1 Identify and Stock Location: GA		SB 08/04/22	⑥
11.0	QC21	FINAL INSPECTION/W/O RELEASE	
Comment: FINAL INSPECTION/W/O RELEASE		08/04/22 KJ	⑦
Job Completion			MF 08-04-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

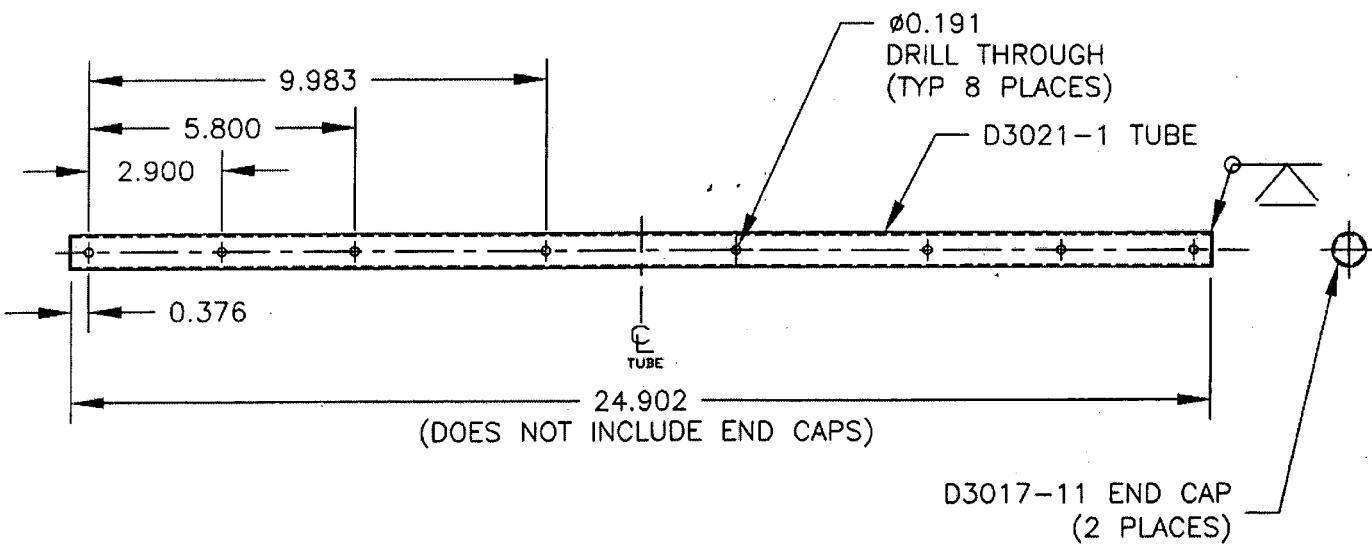
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**DART**



DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. A
		D3021	SHEET 1 OF 1
DATE		TITLE	SCALE
01.05.18		TUBE ASSEMBLY	1:4
A	01.05.18	NEW ISSUE	



D3021-041 TUBE ASSEMBLY  
(D3021-1 TUBE)

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WITHOUT NOTICE  
WORK ORDER  
*3489*

NOTES:

- 1) PART IS SYMMETRIC ABOUT CENTERLINE
- 2) MATERIAL: AISI 4130 TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049) NO.
- 3) WELD PER DART QSI 004
- 4) FINISH: POWDER COAT GREY SANTEX (REF 4.3.5.6) PER DART QSI 005 4.3
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

**RELEASED**  
01.05.2018



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3017	REV. A	SHEET 1 OF 2
DATE 01.05.18		TITLE BACK FRAME ASSEMBLY	SCALE 1:1	
A	01.05.18	NEW ISSUE		

QTY	PART No.	DESCRIPTION	MATERIAL
X	D3017-041	BACK FRAME ASSEMBLY	N/A
1	D3017-1	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
2	D3017-3	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
1	D3017-5	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
3	D3017-7	LUG	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
2	D3017-11	END CAP	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)

## NOTES

- 1) WELD PER DART QSI 004
- 2) ON SHEET METAL PARTS, BREAK ALL UNMARKED CORNERS 0.020-0.040
- 3) FINISH: POWDER COAT GREY SANTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 4) ALL DIMENSIONS ARE IN INCHES.
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

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